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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,157	08/10/2001	Katsumi Tsukamoto	1137-827	3642

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/913,157	Applicant(s) TSUKAMOTO ET AL.	
	Examiner Joy K. Contee	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7,9 and 11 is/are rejected.
- 7) ☒ Claim(s) 2,4,8,10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/29/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Claims 1-11 are pending.
2. Applicant's arguments with respect to claims 1,3,5-7,9 and 11 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi, U.S. Patent No. 5,898,926, previously used, in view of Sato, U.S. Patent No. 6,819,927, recently discovered.

Regarding claims 1 and 7, Konishi discloses a cell switching device (and method) comprising:

a field intensity measuring device that measures a field intensity of signals from each of a plurality base stations adjacent to a base station servicing a mobile station (col. 2, lines 36-60); and

a switching device that receives results of the measurements provided by said measuring device, when the field intensity of a measured base station exceeds a

reference intensity, switches to that base station for communication with the mobile station (col. 2, lines 49-65).

Konishi fails to explicitly disclose: a control device that adjusts a time interval for field intensity measurement, in the measuring device, with respect to the base stations, taking into consideration an increasing or decreasing tendency of the field intensity with respect to the base stations measured by the measuring device.

In a similar field of endeavor, Sato discloses adjusting a time interval (i.e., reads on Δt_2 , RSSI measuring period) for field intensity measurement, in the measuring device, with respect to the base stations, taking into consideration an increasing or decreasing tendency of the field intensity (reads on adjusting the average interval to get accurate measures of RSSI under various conditions) (col. 6, line 46 to col. 7, line 59).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Konishi to include adjusting the RSSI measuring period for the purpose of obtaining accurate measurements under multi-path fluctuation.

5. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi and Sato, in view of well known prior art.

Regarding claims 3 and 9, the combination of Konishi and Sato disclose the cell switching device (and method) according to claims 1 and 7, respectively, but fails to explicitly characterize:

said control means controls the time interval for field intensity measurement with respect to the base stations, taking into consideration absolute values of field intensity with respect to the base stations.

Examiner takes official notice that is well known in the art to take into consideration absolute values of field intensity with respect to the base stations for measuring quality indicators.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the combination of Konishi and Sato to take the absolute values of the RSSI with respect to the base stations for the purpose of measurement techniques and conversion therein (e.g., converted dBm to Volts).

6. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi and Sato, in view of Levanon, U.S. Patent No. 6,369,754.

Regarding claims 5 and 11, the combination of Konishi and Sato discloses the cell switching device (and method) according to claims 1 and 7, respectively, but fails to explicitly characterized in that: said control means controls the time interval for field intensity measurement with respect to a base station, taking into consideration a direction of movement of a satellite.

In a similar field of endeavor, Levanon discloses taking into consideration a direction of movement of a satellite in making measurements in a system for determining the location of a user terminal (col. 5, line 56 to col. 6, line 17).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the combination of Konishi and Sato to include positioning a satellite in conjunction with the base station system for the purpose of accurately determining the location of a mobile user.

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7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi and Sato, in view of Reed et al. (Reed), US Patent No. 5,634,206, previously used.

Regarding claim 6, Konishi as modified by Reed discloses the cell switching device according to claim 1, characterized in that:

said control means is provided in the base station (i.e., base station measures its own RSSI) (see Reed, col. 4, lines 8-27).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Konishi to include a back end receiver for the purpose of estimating fading quality in a base station.

Allowable Subject Matter

8. Claims 2,4,8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K. Contee whose telephone number is 571.272.7906. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571.272.7905. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOY L. CONTEE
PATENT EXAMINER

JC